



## FIG. 18A

pET22b(+) forward primer:

5'-CGG GAT CCG GGT TTG AAA GGA AAA CGT-3' (SEQ ID NO:11)

pET22b(+) reverse primer:

5'-CCC AAG CTT TCA GTG TCT TTT CTT CAT-3' (SEQ ID NO:12)

5	10	15	20	25	30	35	40	45
ggt	ttg	aaa	gga	aaa	cgt	gga	gac	agt
gga	tca	cct	gca	acc	tgg			
50	55	60	65	70	75	80	85	90
aca	acg	aga	ggc	ttt	gtc	ttc	acc	cga
cac	agt	caa	acc	aca	gca			
95	100	105	110	115	120	125	130	135
att	cct	tca	tgt	cca	gag	ggg	aca	gtg
cca	ctc	tac	agt	ggg	ttt			
140	145	150	155	160	165	170	175	180
tct	ttt	ctt	ttt	gta	caa	gga	aat	caa
cga	gcc	cac	gga	caa	gac			
185	190	195	200	205	210	215	220	225
ctt	gga	act	ctt	ggc	agc	tgc	ctg	cag
cga	ttt	acc	aca	atg	cca			
230	235	240	245	250	255	260	265	270
ttc	tta	ttc	tgc	aat	gtc	aat	gat	gta
tgt	aat	ttt	gca	tct	cga			
275	280	285	290	295	300	305	310	315
aat	gat	tat	tca	tac	tgg	ctg	tca	aca
cca	gct	ctg	atg	cca	atg			
320	325	330	335	340	345	350	355	360
aac	atg	gct	ccc	att	act	ggc	aga	gcc
ctt	gag	cct	tat	ata	agc			
365	370	375	380	385	390	395	400	405
aga	tgc	act	gtt	tgt	gaa	ggc	cct	gag
atc	gcc	ata	gcc	gtt	cac			
410	415	420	425	430	435	440	445	450
agc	caa	acc	act	gac	att	cct	cca	tgt
cct	cac	ggc	tgg	att	tct			
455	460	465	470	475	480	485	490	495
ctc	tgg	aaa	gga	ttt	tca	ttc	atc	atg
ttc	aca	agt	gca	ggt	tct			
500	505	510	515	520	525	530	535	540
gag	ggc	acc	ggg	caa	gca	ctg	gcc	tcc
cct	ggc	tcc	tgc	ctg	gaa			
545	550	555	560	565	570	575	580	585
gaa	ttc	cga	gcc	agc	cca	ttt	cta	gaa
tgt	cat	gga	aga	gga	acg			
590	595	600	605	610	615	620	625	630
tgc	aac	tac	tat	tca	aat	tcc	tac	agt
ttc	tgg	ctg	gct	tca	tta			
635	640	645	650	655	660	665	670	675
aac	cca	gaa	aga	atg	ttc	aga	aag	cct
att	cca	tca	act	gtg	aaa			
680	685	690	695	700	705	710	715	720
gct	ggg	gaa	tta	gaa	aaa	ata	ata	agt
cgc	tgt	cag	gtg	tgc	atg			
725	730	735						
<u>aag</u>	<u>aaa</u>	<u>aga</u>	<u>cac</u>	<u>tga</u>				

(SEQ ID NO:9)

pET22b- $\alpha$ 3(IV) NC1 = nucleotides 1 through 732

Tumstatin 333 = nucleotides 1 through 372

Tumstatin 334 = nucleotide 373 through 732



## FIG. 18B

\*  
5 10 15 20 25 30 35 40 45  
GLK GKR GDS GSP ATW TTR GFV FTR HSQ TTA IPS CPE GTV PLY SGF  
  
50 55 60 65 70 75 80 85 90  
SFL FVQ GNQ RAH GQD LGT LGS CLQ RFT TMP FLF CNV NDV CNF ASR  
  
\*+  
95 100 105 110 115 120 125 130 135  
NDY SYW LST PAL MPM NMA PIT GRA LEP YIS RCT VCE GPA IAI AVH  
  
140 145 150 155 160 165 170 175 180  
SQT TDI PPC PHG WIS LWK GFS FIM FTS AGS EGT GQA LAS PGS CLE  
  
185 190 195 200 205 210 215 220 225  
EFR ASP FLE CHG RGT CNY YSN SYS FWL ASL NPE RMF RKP IPS TVK  
  
+  
230 235 240 244  
AGE LEK IIS RCQ VCM KKR H (SEQ ID NO:10)

pET22b  $\alpha$ 3(IV) NC1 = residues 1 through 244

Tumstatin 333 = residues 1 through 124

Tumstatin 334 = residues 125 through 244



FIG. 42

T1 GP-A  
GLKGKRGDSGSPATWTTTRGFVFTRHSQTTAIPSCPEGTVPLYS

T2 T3  
GFSFLFVQGNQRAHGQDLGTLGSCLQRFTTMPFLFCNVNDVCN

T3 T5  
T4 T6  
FASRNDYSYWLSTPALMPMNMAPITGRALEPYISRCTVCEGPA

T6 GP-B  
IAIAVHSQTTDIPPCPHGWISLWKGFIMFTSAGSEGTGQAL  
ASPGSCLEEFRAFPFLECHGRGTCNYYSNSYSFWLASLNPERM  
FRKPIPSTVKAGELEKIISRCQVCMKKRH